THE

AMERICAN PHRENOLOGICAL JOURNAL

AND

MISCELLANY.

Vol. III. Philadelphia, June 1, 1841. No. 9.

ARTICLE I.

Phrenology and Anti-Phrenology; or Review of Select Discourses on the functions of the Nervous System in opposition to Phrenology, &c., by Dr. Smith, of New York.

(Continued from page 357.)

Another argument founded on anatomical considerations, and urged by Professor Smith, is the following: "Nature adheres to the model which she may have adopted, with a pertinacity proportioned to the importance of the part." "The *arrangement* of the interior of the brain is, in different persons, *uniform*, notwithstanding its superficial *convolutions* meander in a manner *by no means constant*. The inference, therefore, would appear to be, that the former constitute the *efficient* and the latter *supplemental* and *unimportant* portions of the sensorium. Yet upon those the phrenologist lays *no stress whatever*, while these he designates as his organs. Has he erred, or is nature inconsistent?" or, it may be added, is Dr. Smith in ignorance and error?

Were we disposed to adopt the professor's mode of procedure, we should say that, according to Sir Charles Bell, "Whatever we observe on one side of the brain, has a corresponding part on the other; and an *exact resemblance* and *symmetry* is preserved in *all* the lateral discoveries." We might thus leave these two of our opponents to settle the difficulty between them. But we prefer the exact truth, which is that there is not in the convolutions of the opposite sides an "exact" but a general resemblance and symmetry—a symmetry as great as between corresponding parts of any other portion of the body.

It is not true that "the phrenologist lays no stress whatever" on the internal parts of the brain. Every part is to him the object of careful study, from the medulla oblongata to the peripheral surface of the convolutions. But he endeavors to discover the true nature of every part. He is careful not to magnify the importance of slight deviations from exact symmetry, and especially does he guard against speaking of differ-

ent parts of the same as though they constituted essentially different organs, or as though any part of nature's noblest work were unimportant. The phrenologist finds the pyramidal bodies commencing together at the upper part of the motory tract of spinal nerves, proceeding together and increasing in size equally. He finds that their fibres decussate, plunge into or through the annular protuberance, receive many additional fibres from its cineritious matter, emerge from the pons greatly augmented in volume form the anterior and outer two thirds of the cerebral crura and proceed, increasing as they go, until they reach their destination in the convolutions, which convolutions on each side essentially correspond in size, number and form. In like manner he perceives fibres arising in the corpora olivaria pass on, form the posterior and interior parts of the crura, plunge into the so called optic thalami and become greatly increased, unite, at the superior part of the bodies, into bundles, and diverge like rays; the anterior bundles, however, traversing the striated bodies and becoming still more enlarged, the extremities of these rays he finds covered with cineritious matter, thus forming the convolutions. In like manner he traces the corpora restiformia to their ultimate expansion in the cerebellum. He sees, too, that when the pyramidal bodies are large, the convolutions into which they ramify are large, and when small, that the corresponding convolutions are small. He perceives the same correspondence between the optic thalami and the size of the convolutions forming their ultimate expansion, and between the annular protuberance and the cerebellum, and thus comes to the conviction of an intimate connection, a mutual dependence, a continuity of parts between the internal portions of the brain and the convolutions; and he maintains as the rational presumption that these internal parts are rudimentary, accumulative and communicative, and consequently subsidiary in their character, chiefly tending to the formation, perfection and association of the convolutions, which he considers the more immediate seat of mental action. This view is corroborated by the researches of phathologists who observe the arachnitis of the periphery or convexity of the brain is early characterized by prominent and violent symptoms of delirium, whereas arachnitis of the deep seated parts of the brain is of a more latent, insidious and comatose character, delirium being often entirely absent. In view of such facts, the phrenologist, whilst acknowledging the difficulty of the inquiry and liability to errror, cannot bring his reason to approve or even to tolerate the supposition of Professor Smith that the convolutions form merely "*supplemental* and *unimportant*" portions of the brain.

But let us take another view of this position of the professor. It is a

well known fact that the number, form and arrangement of the internal parts of the brain are *alike in man and many of the lower animals.** The internal structure of man's brain may be learned from the brain of a *sheep;* while the convolutions are more complicated and voluminous in man than in any other being, and he has some which in no other being exist. Now, as the professor maintains that the brain is the instrument of every mental act, we would ask whether the material cause or medium of man's mental superiority must be looked for in those parts of the brain which *in man and animals agree*, or in *those in which they differ?* in the *internal* parts in which *the sheep* is man's fellow, or in the convoluted portions in which man is so much the superior? Surely there can be but one answer to this question, and that by no means favorable to the notion that the convolutions are "supplemental and unimportant."

That the convolutions of the brain are *somewhat* important, may be gathered from the phenomena of idiocy and genius. What may be noticed in the brains of idiots, in the meagre brains of "thirty ounces or less," of which the professor speaks? Any less symmetry in the internal parts than in the brains of men of genius? Certainly not. But shrunken, shallow, imperfect or deficient convolutions. And what is observed in the brains of men of high mental power? Read the post mortem examinations of the brains of such men as Byron, Scott, Cuvier, and Dupuytren. Any remarkable symmetry of the internal parts? No! but we are told of "convolutions of extraordinary size and depth." Does nature err, or Dr. Smith?

Intimately connected with this subject, is an anatomical fact of great interest. It is this. Throughout nature the complexity of the brain increases with the complexity of an animal's mental functions; in those animals the brains of which are convoluted, the convolutions increase in size and number as the mental powers and capacity of the animals increase; in short, to use the language of Dr. Roget in the Encyclopedia Britanica, "There is no part of the brain found in any animal which does not exist also in man; whilst several of those which are found in man, are *either extremely small or altogether absent* in the brains of the lower animals;" or to use that of Dr. Conolly in the 94th number of the Edinburgh Review, as an animal ascends in the scale of mentality, so does "its brain improve in structure and augment in volume, *each addition* being marked by *some addition or amplification of the powers*

* That these internal parts in man and animals differ in size and in the nature of many of their constituent fibres, we of course fully believe. But the professor's objections are founded solely on considerations of *form and symmetry.*

of the animal, until *in man* we behold it *possessing some parts of which animals are destitute, and wanting none which they possess.*" Now we would ask, is it not in the very highest degree probable that those parts of the brain which man and animals possess in common, constitute the organs of those faculties which they also possess in common, and that those parts possessed by one animal but not by another, constitute the organs of those faculties which the one possesses and the other does not possess? and man "possessing some parts of which animals are destitute, and wanting none which they possess," can we come to any other conclusion than that the additional parts in the brain of man constitute the organs of those faculties which in man are additional and which confer on him his proper humanity? And what parts of the brain are in man additional? Clearly some of the convoluted parts, the upper portion of the forehead and certain portions of the coronal and superior lateral regions, where exist, as observation proves, the seat of reason and of sentiment, the sanctuary of man's high and distinguishing mental attributes, the faculties which enable him from effects to reach back to causes, and from causes to reach forward to effects; which endow him with conscience and benevolence, with the emotions of hope and veneration, with the love of the beautiful, the spiritual and the true. The observations of the phrenologist are corroborated by this; whenever the convolutions of the superior part of the forehead are absent, or developed in a very small degree, the man is an unreasoning idiot; and when the convolutions of the coronal region are very small and shallow, he is a moral idiot; and when both are very deficient, he is stripped of his proper humanity, is rather brute than human; while if the rest of the brain is well developed, he energetically manifests the animal functions. Such facts appeal to our understanding with irresistible force in favor of a plurality of organs in the brain, and they must at any rate demonstrate to every man that the convolutions of the brain are not merely "supplemental and unimportant portions of the sensorium."

On page 119, Professor Smith attempts to show that even if the cerebral organs exist, they can not be ascertained during life, 1st, On account of the irregularities of the skull. 2d, On account of the frontal sinus. The first of these objections we have already sufficiently answered, and we shall not again dwell upon it. The professor himself, we think, places no reliance on it, for various parts of his work show that he in all cases judges of the form and size of the brain from the form and size of the skull or head, the form and size of his own brain not excepted. Magendie shall in this case answer his anti-phrenological coadjutor. "The only way," says he, "of estimating the volume of

the brain in a living person is, to measure the dimensions of the skull." (Compendium of Physiology, pp. 104.)

But as to the frontal sinus. This is a regular article of every anti-phrenologist's stock in trade. It is repeated by professor and student, by the ponderous review and the ephemeral paragraph. Even the most unlearned have caught the term, and "sinus, sinus, sinus," is for ever ringing in one's ears. If the anti-phrenologist knows no other, he knows this objection, in name, at least. It is to him what "oh la!" was to Dicky Snett; it is his alpha and omega, his beginning and end, his first and last, and we may say of him as Elia says of Dicky, "He drolls upon the stock of these two syllables richer than any cuckoo." The reader would hardly suppose from the important air with which this objection is in general paraded, that Gall was the first writer to point out, and that to the fullest extent, the difficulty it presents. Yet such is the fact, and other phrenologists have followed his example. Now we ask whether Professor Smith was not bound to give the phrenologists credit for this, and not to bring forward the objection in such a manner as to convey the impression that this is a matter of which the phrenologist is either ignorant or which he wishes to conceal! We acknowledge that the frontal sinus does present a real though very small obstacle, but let us present the matter in its true light, stating briefly for that purpose the argument of Mr. Combe.

1st. Until about the *age of fourteen*, the frontal sinus either does not exist or does not extend as high as the base of the brain. Up to this time, then, the form of the skull in this region is a correct indication of the size of this part of the brain, and the perceptive organs which lie here being very active at an early period, there is ample opportunity before this age to observe the developement of the organs in this region, and the manifestation of the corresponding faculties.

2d. The frontal sinus interferes with *five* only of the organs, leaving thirty, at least, uninfluenced; for "it would be quite as logical to speak of a snow storm in Norway obstructing the high road from Edinburgh to London, as of a small sinus at the top of the nose concealing the developement of Benevolence, Firmness or Veneration at the top of the head."

3d. After the age of fourteen, the frontal sinus is for some years rather an absence of the diploe of the skull, than an actual separation of the two tables; and, in after life, its size is, as Professor Smith acknowledges, "ordinarily" indicated by external appearances.

4th. When there is a deficient developement of the region in question, the subjacent organs will be stated by the phrenologist as small, and the manifestation of the corresponding faculties as feeble. Now suppose in such a case, the sinus to be of greater than average size, what will be

the result? Why the organs will be smaller and the faculties feebler than the phrenologist had anticipated. The error, therefore, will be all on his side, and consequently but one class of cases remain concerning which there is any difficulty, namely, those in which the region in question is largely developed, but the developement is owing to an extraordinary size of the sinus, and not to a large developement of the brain. But as the sinus is very seldom of great size, except in cases of disease* and old age, neither of which classes of cases the phrenologist takes into account in ascertaining or demonstrating the cerebral functions: this source of error is confined within very narrow limits.

Upon the remainder of the professor's objections on this point, we shall not dwell, but merely observe that phrenologists do not maintain that the organs of the perceptive faculties shrink "as we advance from adolescence to mature manhood." What they do say is that these organs very commonly shrink in old age, and that this shrinking is accompanied by a diminution of perceptive power. As to the formula of the professor, on page 122, we will let it pass. It would be a pity to disturb so interesting a specimen of the plausible absurd. Its garb of profundity will, in many cases, doubtless enable it to glide past the understanding of the reader unquestioned, but such is its error and absurdity, that the moment the understanding does for a moment dwell upon it, surprise will arise that so superficial a thing should have had a moment's power to deceive.

We have alluded to Professor Smith's views as to the seat of the reasoning faculties. We would in this place ask for them more particular attention. On page 130, he says, "There is, in my opinion, sufficient evidence to induce the belief that the more forward parts of the brain, in anatomy the *anterior lobes of the cerebrum*, are principally employed in carrying on those operations of the mind which require the exercise of our *reasoning powers*." We remark, first, that the anterior lobe is not the seat of what the professor has before chosen to consider the "efficient parts" of the brain, but is composed almost entirely of the so called "supplemental and unimportant parts of the sensorium," which are here acknowledged, however, to subserve the important office of "carrying on those operations of the mind which require the exercise of our reasoning powers"—the distinguishing attributes of the human intellect. We have, too, an implied acknowledgment not only that a

* The shrinking of the brain in disease of that organ, is dwelt upon by others than phrenologists. Esquerol mentions an insane female whose forehead, on her admission into the hospital, was so large that he had a drawing made of it, but afterwards it became small and narrow.

particular portion of the brain may have an especial function, but that the seat of that function may be discovered during life, and further, that the phrenologist is right in his belief as to the particular seat of the reasoning faculties. The only difference between him and the professor being, that the latter speaks of the anterior lobe generally, and the former of a particular portion of it, to wit, the anterior superior part. In the succeeding paragraph, the professor expresses an opinion in still more exact accordance with phrenological views. "I hold it to be *certain*," says he, "that, comparing races of men and classes of animals, the intelligence will be in proportion to the projection of the frontal lobe." This is almost equivalent to the phrenological proposition that the anterior lobe of the brain is the especial seat of the intellect. We ask, therefore, whether the professor does not in this place virtually abandon his objections and especially his opposition to the doctrine that particular parts of the brain have particular functions? It really appears to us that after disputing the ground with the phrenologist inch by inch, ingeniously, urgently, tenaciously, and in tones of triumph, he comes forward at the close and voluntarily relinquishes the field, acknowledging that he cannot deny but the phrenological doctrine is true. That such relinquishment is intended, we do not maintain; that in judgment of reason it is given, we seriously affirm.

That the brain is a congeries of organs, physiological observation, anatomical structure, general analogy, pathological facts, and sound reason unite to prove. Without it, the physiology of the brain is involved in chimerian darkness, the manifestations of mind are inexplicable. Commencing with the position that the brain is engaged in every mental act, how by its unity of function is it possible to explain the diversity of talents and dispositions, the successive developement of the mental faculties, the phenomena of partial sleep, dreaming and somnambulism: of monomania or partial insanity: of partial idiocy, partial genius, and other analagous phenomena? So far is this unity of function from explaining these phenomena, that against it every one of them rises in irreconcilable contradiction and hostility; but with the doctrine that each faculty of the mind is manifested by a particular organ, all these phenomena clearly and beautifully harmonize.

In our efforts to rid this most important proposition of the doubts and difficulties in which Professor Smith has involved it, we trust we have shown that to it facts are not hostile but favorable; that physiological phenomena are irreconcilable with any other doctrine; that with it, correct anatomy is in perfect harmony. We trust we have shown, too, that the professor's objections are unsound and ill taken, and that his arguments

are erroneous in their logical sequences. Let us, in conclusion, however, be permitted to remind the reader never to lose sight of the important fact that phrenology is an experimental science, and that for full and entire satisfaction of its truth, he must resort to the observation of nature, our great teacher and advocate.

Professor Smith strenuously objects also to the phrenological proposition that "Size, other things being equal, is the measure of power." To us nothing seems more conclusive of the unreasoning spirit of our opponents, than their denial and denunciation of this principle: a principle comprehensive as the creation itself, and which really seems self-evidently true. If one cubic foot of matter possesses a certain amount of attractive force, have not two cubic feet of like matter twice that attractive force? If a square inch of pulmonary surface has a certain amount of aerating power, have not two square inches, similar in every respect, twice that aerating power? If one muscular fibre possesses a certain amount of strength, does not two such fibres possess twice that strength? Must not two equal nervous fibres have double the power of one of those fibres? and two equal square inches of tactile, auditory, gustatory, optical, or olfactory surface have twice the respective, specific power of one? and is not this law of size equally applicable to the brain and its several parts? The affirmative of these questions possesses mathematical certainty.

When we commenced the perusal of the "Select Discourses," we did not anticipate opposition from Dr. Smith on this point, for on page 7, he lays it down as "a well *established principle*, that the effect which any organ produces in the body, is in the compound ratio of its *relative bulk* and the quantity of aerated blood which it may receive." On page 48, he states still more explicitly that "the function of a part, *whatever that function may be*, is always performed with a vigor *proportioned to its bulk* and the greater or less supply of aerated blood which it may receive, unless the afflux of that fluid be so redundant as to prove suffocating, or so long continued as to become exhausting." Here size is stated as the absolute and exact measure of power, except so far as its influence is modified by the supply and quality of the blood. But truth requires that the proposition be not so broadly stated, for though the supply and quality of the blood are very effective modifying conditions, they are by no means the only ones. In the muscles, for instance, the influence of size is modified by the greater or less delicacy and compactness of the fibres, the greater or less amount of training, the greater or less supply of motory nerves, and the greater or less cerebral energy, as well as by the supply and quality of the blood. And it is absolutely

necessary to correctness in treating of any part of the system, that *all* the modifying influences should be estimated as accurately as possible. The only true mode of stating the proposition is, therefore, the phrenological mode, "size, other things being equal, is the measure of power."

But we must now change our course, in accordance with our Petruchio's varying mood. We have seen that above he has been too latitudinarian in his views. It was, however, when not under the disturbing and darkening influence of anti-phrenological excitement. No sooner does he come within the verge of that influence, than principles have to change, and nature to reverse her laws, rather than the phrenologist be allowed a foot of neutral ground on which he may rest in peace. The professor attacks the very principle which he has so broadly and explicitly stated, as though it were fearful heresy, and soon arrives, to his own entire satisfaction, at the conclusion that it is false and groundless! After which, however, as if suddenly relenting, he says as a matter of "generosity" that he "will *concede something* to the size of the head, and the varying conditions of the circulation." We in return would propose that nature unite with the phrenologist in returning thanks to the professor for this liberal concession.

On page 129, after stating that "a brain weighing thirty ounces or less, is so incapable of performing its functions that idiocy results," he acknowledges that he is "*inclined* to believe that if you take one thousand persons with heads *unusually* large, and one thousand with heads *unusually* small, that the former will, collectively, surpass the latter," and that "since the brain forms the material instrument of thought, it may well *happen* that quantity is, to a *certain extent*, indispensable to its efficiency!" As if fearful, however, that this doubt may be construed too liberally, he afterwards very gravely affirms that "between individual and individual, mere *bulk* of head is an element of *no appreciable* importance," pp. 130. But as if he had not already sufficiently puzzled the reader about his meaning, he follows up this by stating his opinion that "comparing races of men and classes of animals, the intelligence will be in proportion to the *projection* of the frontal lobes," and by eulogizing the accuracy of phrenologists in taking the *distance* directly from the auditory passage to the most projecting part of the forehead, as the measure of intelligence. May we not ask the professor on what "*projection*" and "*distance*" depend, if not upon size? the very element which he has been treating so cavalierly! The phrenologists must indeed be sorry dialecticians, if Professor Smith is entitled to school them about logic and consistency.

The fact is that the doctrine of size, as stated by the phrenologist, is

fully and completely recognized by all physiologists when treating of every part of the animal economy, except the brain, and by many of them, as Cuvier, and Tiedemann, when treating of this organ also. Let us show their usual language by a few extracts from a treatise of Dr. Roget, an anti-phrenologist of some eminence. First observing, however, that this writer, in his article "Craniscopy," published in the Encyclopedia Britannica, opposes the doctrine of size by the following argument: "To the *perfection* of a refined and delicate instrument, such as must be that which is subservient to the operations of the intellect, innumerable conditions must concur, among which that of size, it is reasonable to suppose, is the least important. Delicacy of texture, fineness of organization, and harmony of adjustment between the several parts of its complete structure, must contribute infinitely more towards rendering it *capable* of performing its office, than superior magnitude." This is a specimen of the truly fallacious mode of reasoning resorted to in what has been called "the most formidable attack phrenology ever had to sustain." The phrenologist, comparing two instruments of *like structure and function*, says that the largest, other things being equal, will be the most powerful. This is a "phantom," says Dr. Roget. Size is not the measure of power in the brain, because its *appropriateness* of structure, its *perfection* as an instrument, its *capability* of acting as the mind's organ, depends more upon other things than size! And thus one truth is gravely opposed by the assertion of another equally plain and perfectly harmonious truth. We have the form but not the substance of an argument; a collocation of words by which sound is enabled to play a trick upon the understanding.

Let us turn, however, to Dr. Roget's article on Physiology, also published in the Encyclopedia Britannica, and mark the living energy, the pervading influence of this much abused principle:

§926. "*Every part of the organ of smell is developed in quadrupeds in a degree corresponding to the greater extent and acuteness* in which they enjoy this sense compared with man."

§938. "The eye of the bat is remarkably *small*, but the *imperfections* which probably exist in the sense of sight, are amply compensated by the *singular acuteness* of that of hearing, *the organ* of which is *exceedingly developed*."

§940. "The ethmoid bone is of very complicated formation in the male, especially in the numerous convolutions of its turbinated process by which a *very large surface* is given to the Schneiderian membrane which lines every portion. *This structure indicates* the possession of a *very acute sense of smell*. The *remarkable developement* of the

internal parts of the ears, is also *conclusive evidence* of the *delicacy of the sense of hearing* in this animal, although it has no external ear whatever."

§948. "In the genus felia, the long bristly hairs which constitute the whiskers, receive *very considerable nervous filaments* and appear subservient to the *sense of touch* in a *very remarkable degree*."

§998. "In the whale, the *olfactory organs* are *not adapted* to the possession of any *accurate sense of smell*, being furnished neither with turbinated bones *nor with any considerable nerves*."

§1015. "The eyes of birds are *very large* in proportion to the size of the head, and appear to be adapted to a *great range of vision*."

Here we see the principle which Dr. Roget styles a "phantom," completely imbuing, as it were, his physiological remarks. Its truth is indeed so plainly written on every page of nature, that LARGE and POWERFUL are treated almost as synonymous terms. We might note down volumes of such facts as the foregoing, confirmatory of this principle, but these must suffice. Let us turn again, for an instant, to Dr. Roget's "Cranioscopy." There we shall find in opposition to facts by him so explicitly stated, that he quotes approvingly, Professor Hufeland's assertion that small eyes see with more strength than large ones,* and then asks, "*Why may not this be also the case with the organs of the brain?*" Aye, why not? What reason can be given why a brain may not be increased in power by a diminution of its size? Why may not size, *caeteris paribus*, be the measure of feebleness instead of might? This very interesting anti-phrenological problem we leave, as an exercise of the reader's ingenuity. After solving it, he will be prepared to try his skill on another problem equally difficult, namely, Why may not a half be greater than the whole?

To prove that size is the measure of power in the brain, as well as in other organs, we will proceed to the consideration of a few well ascertained facts in relation to man himself.

That man is superior to woman in general mental power, is almost universally acknowledged, we believe, by the gentler sex even. In accordance with this, is the superior size and weight of the brain in man. In the appendix to Dr. Monro's work on the brain, Sir William Hamilton states the average weight of the adult male Scotch brain to be three pounds eight ounces, and that of the adult female Scotch brain to be three pounds four ounces. Professor Tiedemann states that "the female

* In the application which he makes of this quotation, Dr. Roget seems to have forgotten that it is not the mechanical frame work of the eye, but the retina, which constitutes the true external organ of vision.

brain weighs, on an average, from *four to eight ounces less* than that of the male, and that this difference is already perceptible in a *new born child!*"

The varying size of the brain at different ages, is another strong corroboration of the principle for which we contend. Mental power is least in infancy; it strengthens in childhood and youth; attains its acme in the vigor of manhood, and declines in old age. The size of the brain follows precisely the same course. It is least in infancy, increases through childhood and youth, attains its full size from about twenty-two to thirty, in some cases as late as forty years of age, and diminishes in the decline of life. These facts have been amply proved by phrenologists, but let us turn to general physiologists for corroboration. Cruvilhier ascertained the brain in three young subjects to weigh, on an average, two pounds nine ounces each. The average of the adult Scotch male brain, we have seen above, to be three pounds eight ounces. Professor Tiedemann examined fifty-two brains, and states as the results that the weight of the brain in an adult male European, varies from three pounds two ounces, to four pounds six ounces, troy. He also remarks, "I have generally found the cavity of the skull *smaller in old men* than in middle-aged persons. It appears to me, therefore, probable, that the brain really decreases in old age, only more remarkably in some persons than in others." "According to the researches of Desmoulins," says Dr. Stokes, (Lectures on the Theory and Practice of Physic, edited by Dr. Bell, pp. 256,) "it appears that in persons who have passed the age of seventy, the specific gravity of the brain becomes from one twentieth to one fifteenth less than that of the adult. It has also been proved that this atrophy of the brain is connected with old age, and not, as it might be thought, with general emaciation of the body: for in chronic emaciation from disease in adults, the brain is the last part which is found to atrophy."

The difference between the brain of the idiot and that of the man of great general mental power, strongly corroborates our proposition. Dr. Voisin states that in the lowest class of idiots under his care at the Hospital of Incurables, the horizontal circumference varied from *eleven to thirteen* inches and the distance from the top of the nose to the occipital spine, over the top of the head, was but eight or nine inches. Professor Tiedemann says that in cases of congenital idiotismus, the brain rarely exceeds in weight that of a new born child. On the contrary, he remarks, that "the brain of men who have distinguished themselves by their great talents, is often very large. The brain of the celebrated Cuvier weighed 4 lbs. 11 ozs. 4 dr. 30 grs. troy, and that of the celebrated Surgeon,

Dupuytren, weighed 4 lbs. 10 ozs. troy. He subsequently remarks that the observations of Gall, Spurzheim, Halsam, Esquirol, and others, on this subject, are confirmed by his own researches. Independently of the overwhelming proofs by which it might be demonstrated, might we not reasonably infer from such facts that the gradations of general mental power would accord with the gradations of general cerebral bulk, from the idiot through all intermediate degrees, up to the master minds of their race?

But let us look at facts as we see them presented in the organization of the various races of mankind. And here, in addition to all that the phrenologists have accomplished, we have the results, especially, of Dr. Morton's labors as presented in his truly valuable work, the Crania Americana, almost every page of which is confirmatory of phrenological doctrines. From this work we copy the following most interesting table, containing the results of his measurements of the capacity of near two hundred and fifty skulls:

Races.	No. of Skulls.	Mean internal capacity in cubic inches.	Largest in the series.	Smallest in the series.
1. Caucasian,	52	87	109	75
2. Mongolian,	10	83	93	69
3. Malay,	18	81	89	64
4. American,	147	80	100	60
5. Ethiopian,	29	78	94	65

He who is acquainted with the history of mankind, and the character and comparative influence of its various races, will at once appreciate the bearing and force of the above results. At the head of the list we see the Caucasian race, the master of the world, the arbiter of its feebler brethren. At the foot of the list we find the poor Ethiopian, the "servants of servants." Dr. Morton remarks that, with a single exception, the Caucasian skulls were taken from the lowest and least educated class of society, and included three Hindoo skulls. Now as the lowest class of society have generally smaller heads than the educated and influential, and as the Hindoo skulls were of 75 inches only in capacity, the above average is too low for the European head, and ought to be stated at not less than 90 cubic inches. We find the European brain then to be on an average *twelve* cubic inches larger, and the largest of the European brains to be *thirty-one* cubic inches larger than the average Ethiopian brain. If we had time to enter into details, it would be easy to show the light which the principle for which we are contending throws on the path of the historian. The conquest of Peru by Pizarro, with his 160 soldiers, loses much of its marvellousness to the enlightened physiologist,

when he learns that these same Peruvians, with brains of the average size of 73 cubic inches, had to contend with Europeans whose brains were 17 cubic inches greater. Their immense superiority of mental resources, intellectual grasp, and nervous energy, conferred on the Europeans a power before which the Peruvians became as sheep when the wolves have entered the fold. Numbers could not avail them. But we need not go to past centuries for confirmations of our principle. We see at the present day a small nation, the law-giver of a seventh part of all the inhabitants of the earth. "She girds the globe," says the Abbe de Pradt, "with a chain of posts disposed with art around its circumference; thus placing every avenue under her control, and, as it were, under her key. From Heligoland to Madras, and from the Ganges to Hudson's Bay; at Jersey, at Gibralta, at Corfu, at Malta, at the Cape of Good Hope, at St. Helena, at the Isle of France, Ceylon, Antigua, Trinidad, Jamaica, Halifax, every where, she is seated upon rock, or placed upon inaccessible islands; every where in safety herself, every where menacing others."

Whence comes the activity, the energy, the mightiness, the overshadowing influence of America's father-land? Let Professor Caldwell answer for the phrenologist. "Great Britain," says he, "is peopled chiefly by anglo-Saxons, the most highly endowed variety of the Caucasion race. Their brains are superior in size and more perfect in figures, than the brains of any other variety; and from temperament and exercise, they are in function the most *powerful* at least, if not the most active. And hence the surpassing strength and grandeur at home, and the influence and sway over the other nations of the earth, of those who possess them. The vast and astonishing productions of art in Great Britain, her boundless resources of comfort and enjoyment in peace, and her unparalleled means of defence and annoyance in war, are as literally the growth of the brains of her inhabitants, as her oaks, and elms, and ash trees are of her soil." Let us look to Asia; there we see that England has subdued a hundred and twenty million of people, and that forty thousand of her sons retain them in subjection; one man in charge of three thousand! What shall explain this? The Hindoos were a civilized people, having a knowledge of letters and arts before Cæsar set foot upon Britain, or even the foundations of Rome were laid. How then shall this problem be solved? What great fact shall furnish us the key? We answer, the solution will be found in the cerebral superiority of the Anglo-Saxon, and in the superior physical activity, energy and prowess which accompanies such superiority. The Englishman has not only a better balanced brain than the Hindoo, but a brain exceeding

that of the Hindoo, in average absolute bulk, more than *fifteen* cubic inches.

Correspondence of cerebral developement and mental power, is found every where on a broad scale, among the nations of the earth. Let these same Englishmen come into collision with people whose brains are nearly of the same size as their own, and what is the result? They have to provide man for man, to put forth all their energies, employ all their resources, and keep their sagacity on the stretch. If they gain a victory, it is accompanied by losses over which the victors themselves might well weep. Advantages are not often permanently retained; a triumphant advance is often but the precurser of a mortifying retreat; and when they have spent their energies in vain attempts at subjugation, they pantingly agree to a cessation of hostilities, that they may take breath and recruit their exhausted power and resources.

How fare the subtle objections of Professor Smith against the phrenological doctrine of size, when the light of these great truths are concentrated upon them? They seem to us to hurry away like thin mists from the sun's gaze.

"The functions of a part, whatsoever that function may be, is always performed with *vigor proportioned to its bulk*, and the greater or less supply of aeriated blood." "We will concede *something* to the size of the head." "Between individual and individual, mere *bulk of head* is an element of *no appreciable* importance." "Intelligence will be in proportion to the *projection* of the frontal lobes," is the strangely contradictory language of Professor Smith. "Size, other things being equal, is the measure of power," is the uniform language of the phrenologist. Between the phrenologist and the professor, let the reader judge.

At the close of this argument in relation to size, let us caution the inquirer against an error of Cuvier, Tiedemann, and others, namely, that of taking general size of brain as the measure of *intellectual* power. Intellectual power depends on the developement of the frontal lobe alone, and this may be small or large in relation to the other regions of the brain. The Hindoos with their very small brains, have a comparatively full developement of the anterior region, and they manifest much intellectual ingenuity with little force of character. Most of the North American Indians, on the contrary, with their comparatively large brains, have an overwhelming developement of the basilar and posterior regions, and with little intellectual and feeble moral power, they have immense force of the propensities. They are almost incapable of appreciating the arts, the intellectual and moral delights of civilized man, but they

are haughty, unyielding, fierce, indomitable and blood-thirsty; they may be overpowered but not subdued, exterminated but not enslaved. We can merely verge on this interesting subject as an enforcement of the caution above given.

Professor Smith opposes phrenology on the ground, also, that if the the influence of temperaments be admitted, the cerebral organs are unnecessary. "A reference to temperaments would seem fatal," says he, "since, if it be conceded that our mental qualities depend upon causes unconnected with the organs and paramount to their influence, why introduce superfluous machinery? Why not dispense with the organs altogether?" What is temperament that such language as this should be used concerning it? So far as phrenology is concerned, it signifies those conditions of the animal economy which modify the influence of size on the vigor, vivacity, and energy of the cerebral organs. To pretend, therefore, that the organs are superfluous because we have the temperaments, is a sheer absurdity. As well might it be pretended that steam engines are superfluous because we know the various qualities on which their strength and efficiency depend, and by the varying power of steam under various degrees of pressure. To be sure, the absurdity is not Dr. Smith's "*if it be conceded* that our mental qualities depend upon causes *unconnected* with the organs." But this, so far from being conceded, is explicitly and unconditionally denied. We contend that no influence can reach the mind except through the cerebral organs; that no mental quality is in the very slightest degree affected by any cause which does not affect one or more of these organs *pari passu*. Leave out of view the doctrine of the brain's complexity, and all this is fully admitted by the professor himself. "I believe the brain," says he, "to be connected with the mind so far like *cog-work* in mechanics, that movements originating as they may in the one, are *necessarily* communicated to the other." pp. 81.

But Professor Smith further contends that the phrenological view of the brain's organization entirely excludes temperaments from consideration. His argument is, that the modifying power of the blood over size, constitutes temperament, and that the phrenologist is precluded from considering this modifying power, "because," says he, "in that case, phrenology and fact would be brought into collision; for, according to that interpretation of the word, where 'cautiousness' is large and predominent, a man should become less timid as the play of his lungs is impeded, or as the quantity of vital fluid passing to his head diminishes. While on the contrary, his *cowardice* should augment if more impetuous torrents, or blood more highly aerated, were driven through his *craven*

organization—results, in either case, directly opposed to the truth, as every one knows."

In the first place, we remark that the function of the organ of Cautiousness is not to manifest "cowardice," and that the organization in which it is found, is not necessarily a "craven organization." Cautiousness is the quality which this organ manifests, and among those who have possessed this quality in a high degree, are some of the greatest statesmen and generals that the world has produced.

We remark, in the second place, that the phrenologist does not "mean" that the quantity and quality of the blood are most important items in the sum of those influences to which he applies the term temperament, out they do not of themselves constitute that sum. Nor does Professor Smith himself in his introductory lecture maintain this; on the contrary, he speaks of the influence of the liver, spleen, muscles, fat, skin, and other parts, often granting far more to these influences than correct observation will warrant. Thus, in speaking of the influence of the liver over mental manifestations, he assures us that one condition of this viscus renders a person "cold, cautious, calculating," "his temper suspicious," "he neither believes in friendship nor possesses friends." Another condition of this viscus, indicates its possessor to be "the most contemptible being that inhabits the earth. He is poor, weak, mean and malicious; devoid of every noble sentiment, of every generous feeling." Another condition is indicative of men "of strong minds and glowing imaginations." Another produces "your ordinary hypochondriac, who is tormented with a thousand ridiculous fears and fancies which have no foundation except in his own imagination." Were such views of the influence of this viscus correct, the brain would be wrongly styled *the* organ of the mind; and the inquiry, "How is your liver?" one of Laura's first questions to her long lost husband Beppo, would be so far removed from the ludicrous as to constitute one of the most tender, considerate, philosophical and important inquiries which it were possible to make.

It is worthy of remark, that this professor who has taken upon himself the office of public rebuker of the cautious, fact-gathering, nature-studying phrenologist, gravely attributes all these startling influences to the liver, without the slightest attempt to prove that there is in truth and in fact any peculiar size, form, structure, or degree of consistency in this viscus, or any peculiar color, quality, or quantity of its secretion, connected with any of the peculiarities of disproportion of which he so confidently treats. We are not informed that at the foundation of this swelling and highly wrought fabric, even a single physiological observation exists!

We will now grant, for the sake of the argument, that the modifying influence of the blood is all that is meant by temperament. How then will stand the professor's objections? According to phrenology, says he "where Cautiousness is large and predominant, a man should become less timid as the play of the lungs is impeded, or as the quantity of the vital fluid passing to his HEAD diminishes, while on the contrary, his cowardice should augment if more impetuous torrents or blood more highly aerated were driven through his craven organization—results, in either case," he continues "directly opposed to the truth, as every one knows." That is, he maintains that fear, or "timidity," bears an inverse ratio to the quantity and aeration of the blood passing to the "head." Let us examine his objection.

Observe, in the first place, that the professor does not state a proposition maintained by the phrenologist, or logically deducible from their doctrines. He confounds the organ of Cautiousness with the "HEAD," a rather clumsy mistake! He might, perhaps, have stated the phrenologists to be bound by the proposition that "a man should become less cautious or fearful as the quantity of vital fluid passing to the *organ of Cautiousness* (not the head) diminishes; while on the contrary, his cautiousness, fear or desire of safety should augment if more impetuous torrents or blood more highly aerated were driven (not through his craven organization, but) through his *organ of Cautiousness*." This last proposition we might own and defend, but as it is not that of which Professor Smith asserts the falsehood, we are not called upon for a reply.

We will, however, go further than we are bound, and for the sake of showing the want of precision in the professor's physiological views, take up the so called phrenological proposition nearly as the professor has stated, and we assert that though less definitely expressed than desirable, so far is it from being "directly opposed to the truth, as every one knows," that it is essentially true, as every enlightened physiologist and pathologist knows. Fear is a positive mental emotion, and like all other such emotions, it is accompanied by cerebral excitement proportioned to its intensity, and this cerebral excitement is accompanied by a corresponding determination of blood to the "head." Is proof of this needed? Look on the fear-stricken being and say whether any one symptom indicates repose or evinces diminished arterial or cerebral excitement. Is it the palpitating heart or flurried pulse? Is it the intense expression, the wild, restless eye of alarm, or terror's fixedness of gaze? Surely not. The pallid countenance perhaps? This, on the contrary, proves that the equilibrium of the circulation is broken up,

that superactivity somewhere exists, and is robbing the countenance of its due proportion of blood. What aid does pathology give to the professor's objection? None; but demonstrates its erroneousness by the notable fact that death by cerebral apoplexy, death from what the professor calls the "suffocation of an organ by excessive supply of blood," is as often the effect of excessive fear as of excessive rage. In whatever point of view we regard this objection of Professor Smith, it is discreditable to his knowledge and accuracy, and not quite so correct in argument as might be expected from a great logician who volunteers to pronounce sentence so freely and confidently on the dialectics of the phrenologists.

We here close our review of the "Select Discourses." Their errors and fallacies are not yet exhausted, but we have endeavored fully and fairly to meet all those facts, assertions and arguments on which their author seems most confidently to rely. In taking leave of the professor, we would humbly express the hope that he may yet be induced to reconsider the whole subject, and investigate for himself the groundwork of the phrenological doctrines. Should he do this with the single desire of arriving at correct conclusions, we cannot doubt the result; and if he arrive at the conclusions which, in such a case, we deem inevitable, the requisitions of conscience and honor are plain; fortunately, too, they prescribe such a course as even an enlightened and far-sighted expediency would suggest—the open renunciation of error. Whoever discovers that with the means of correct knowledge in his power, he has been seeking pre-eminence by assailing truth, may well regret his course, but need never be ashamed of defeat, for truth no man can conquer; its assailant, however, may confidently reckon on a rebound which, if reparation be not made, will, sooner or later, render his reputation a wreck, if not a mockery.

ARTICLE II.

PHRENOLOGY IN SCHOOLS.

The attention of the public has, of late, been repeatedly called to the importance of introducing Physiology and Anatomy as regular studies into our common schools and institutions of learning. Several works embracing the elements of these sciences have already been prepared and published with this object in view. It is truly gratifying to witness the increasing interest in the community on these subjects, and we hope

the day is not far distant when the study of Anatomy and Physiology will receive that attention in all schools, both public and private, which their nature and importance absolutely demand. The saying of the poet that "the proper study of mankind is man," is no less trite than true. But hitherto, this study has been sadly neglected, while almost every other branch that could be thought of, whether it afforded any mental discipline or practical utility or not, has received far greater attention A century hence, the tables will be turned: the physical and mental constitution of man and their relations to external objects, will then occupy a conspicuous place.

Among the various means which will operate to bring about such a state of things, the influence of Phrenology will have no small agency. It is not to be expected that those who have passed the meridian of life will ever become much interested in the science themselves, or do much for its advancement; but it will be studied and embraced by the *young*, and they, too, will carry out and apply its principles. It will yet be made a distinct branch of study in our schools, as much as chemistry and astronomy. In fact, the science is already introduced into several popular works on Physiology, which are extensively used as text-books of study in various parts of the union. In the February number of the Journal, we had occasion to notice a work of this kind by Dr. Reynall Coates of this city, since which a friend has placed in our hands a similar work by Dr. Charles A. Lee, late Professor in the University of New York. This work is published by the American Common School Union, and has passed through several editions. We rejoice to find so correct and full exposition of Phrenology in a work which has such an extensive circulation, and which is doubtless studied by many thousands of the young. The following extract will show how clearly and correctly the principles of the science are presented in Dr. Lee's work on Human Physiology:

Phrenology.—The actual meaning of the term *Phrenology*, is "a discourse about the mind," or, "the doctrine of the mind." It professes indeed to be a system of Mental Philosophy, and as it is pretends to be founded in nature and supported by facts, it certainly is not beneath the attention of the candid enquirer after truth.

The chief doctrines which phrenology claims to have established, are the following:—

1. That the moral and the intellectual faculties are innate.
2. That their exercise, or manifestation, depends on organization.
3. That the brain is the organ of all the propensities, sentiments, and faculties.

4. That the brain is composed of as many particular organs as there are propensities, sentiments, and faculties, which differ essentially from each other. These four propositions may be said to constitute the phrenological doctrine, and they are sustained by such numerous experiments, observations, and facts, that a large proportion of enlightened physiologists of the present day acquiesce in their correctness.

Another and a different proposition, however, and one which, by many, is erroneously supposed, alone, to constitute phrenology, is, that we are able to recognize on the exterior of the skull, the seats of the particular organs, or intellectual and moral faculties, and thus determine the character of individuals. This proposition has not received that general concurrence of physiologists, in its support, which has attended the former; but there are so many zealous and able inquiriers now in the field, and such is the ardor in pursuit of knowledge, connected with this subject, that a few years at farthest, probably, will suffice to overthrow or establish it.

I have already mentioned some facts to prove that the brain is the organ of the mind, and that the condition of that organ influences the mind; let us now inquire whether the mind, in *every act*, employs the *whole brain* as one organ, or whether separate faculties of the mind are connected with distinct portions of the brain as their respective organs? It is a well established fact in physiology, that different functions are never performed by the same organ, but that each function has an organ for itself. Thus the eyes see, the ears hear, the tongue tastes, the nose smells, the stomach digests food, the heart circulates the blood, the liver secretes bile, &c. Even where the function is compound, as in the tongue, where a feeling, taste, and motion are all combined, we find a separate nerve for each function, and the same occurs in every part of the body. Now, as no nerve performs two functions, we may, reasoning from analogy, conclude, that it is so in the brain; different sentiments, different faculties, and different propensities, require for their manifestation different organs or portions of cerebral matter.

Again, the external senses have for their exercise, not only separate and external organs, but also as many separate internal organs. Hearing, seeing, smelling, &c., require different portions of cerebral substance for their exercise; may we not then from analogy, be justified in the conclusion, that there are as many cerebral, or nervous systems, or organs, as there are special internal senses, and particular intellectual and moral faculties? The legitimate inference then is, that each faculty does possess in the brain a nervous organ appropriated to its production, the same as each of the senses has its particular nervous organ. The struc

ture of the brain is not homogeneous, but differs greatly in different parts, both in composition, form, color, consistence, and arrangement. But what object could there be in all this variety, if the brain acted as a whole, and there was but a single intellectual principle or faculty? A difference of structure shows that there must be a difference of function, and as the brain has been proved to be the organ of the mind, it follows that different portions or organs of the brain must be employed by the intellectual and moral faculties.

The faculties do not all appear at once, nor do they fail at once, but they appear in succession, and as a general rule, the reflecting or reasoning faculties are the latest in arriving at perfection. So also the organization of the brain is unfolded in a slow and gradual manner, and the intellectual faculties appear in succession only as the structure is perfected. For example, in infancy, the cerebellum forms one fifteenth of the encephalic mass; in adult age about one sixth. In childhood the middle parts of the forehead preponderate; in later life, the upper lateral regions are more prominent, which facts are also in accordance with the periods of unfolding the knowing and reasoning faculties.

Genius is almost always partial; that is, men generally have a taste or faculty for one particular pursuit, or study, in which alone they have the power of excelling. One has a talent for poetry, another for mechanics, another for drawing, music, or mathematics, and that is often developed at a very early age, and without the advantages of education, or particular instruction, and these persons may, in all other pursuits, be below mediocrity. Indeed, nothing is more common than to see in the same individuals some faculties acute and powerful, while others are feeble and defective, &c., while as to other things it is deficient. Such facts are not easily explained on the scheme of a single intellectual faculty, and a single organ devoted to its exercise.

It is an observation of common notoriety, that when the mind is fatigued with one kind of occupation or study, it can engage with vigor in one of a different kind, requiring the exercise of different faculties; and thus, instead of fatiguing, actually acts as a restorative. Could this happen unless there were a plurality of faculties and organs of the intellect? The phenomena of partial idiocy and partial insanity are at variance with the doctrine of a single organ of mind. We often see persons in a state of *monomania*, that is, they are rational enough on all subjects but one; but in relation to that, they are entirely mad. Now if the brain be sufficiently sound to manifest all the other faculties in their perfect state, why is it not also able to manifest this?

Numerous cases are contained in medical works where a wound of

the brain was succeeded by the loss of a single faculty. Larrey, in his surgical memoirs, mentions several cases of wounds made by bayonets and swords penetrating the brain through the orbit of the eye, which entailed the loss of memory for names, but not of things, &c.

Such are a few of the arguments adduced by writers on this subject, to prove that the brain is not only the organ of the mind, but an *apparatus*, a congeries of organs, each of which is the seat of a particular faculty, the organ of a particular function. The evidence to most minds will appear satisfactory and conclusive on this point, though other facts and more extended investigations are needed to place the science on a permanent foundation.

ARTICLE III.

PRACTICAL PHRENOLOGY TESTED.*

The following is an authentic phrenological examination of a gentleman of our acquaintance, recently made by those excellent Phrenologists and able lecturers, the Messrs. Fowlers, at the Marlboro' Chapel, *separately*, and without any previous consultation between themselves, or personal knowledge of the gentleman examined. There is a remarkable concurrence in their opinions, which could hardly have been the result of conjecture. It will no doubt be read and examined with interest by those who doubt the science, as well as by its friends. The gentleman examined thinks every body will now be compelled to believe in phrenology "in spite of their *teeth*."

Examination by O. S. Fowler.—This gentleman's leading quality is energy of character, and that disposition to rise in the world which will render him *conspicuous* in *some* capacity. He never will be a servant to any one; will be at the head or no where, and will make a noise in the world; rather proud, and thinks *he* knows and can do a little better than any one else; firm even to obstinacy; loves opposition and debate better than his dinner, which is saying considerable; cannot

* The above article is copied *verbatim* from the Boston Daily Mail of April 29th. We will merely add that the gentleman examined is by profession a *Surgeon Dentist*, well known in Boston; and the analysis of his character as here given, is acknowledged by those who are best acquainted with him, to be remarkably correct in every particular.—Ed.

be driven, but is contrary when opposed; enterprising; must do a big business or none, and charges high, not because he is fond of money, which he spends freely, but because he thinks *his* services worth more than those of others; radical; a doubter till he can *see* and know for himself; does his own thinking; speaks out his mind without disguise; not always judicious in his remarks; talks freely of himself; has much dont-care-ativeness, and treats with contempt those who cross his path; a whole-souled friend, and will do any thing for those he likes, yet his indignation is powerful, and dislikes deep and lasting; all action and life; never one minute idle, but pushes his plans with great spirit, leaving no stone unturned; full of fun, yet his jokes are tart and cutting, and sting more than tickle; a *first rate* mechanic, but, having much taste, he should engage in some *nice* mechanical business, or as an artist; gives strength and polish to all he does; so that his work looks well and lasts long; is one in thousands for his real native ingenuity and dexterity with tools, and can make any thing; carries a remarkable steady hand; excells in fitting every thing to its place, and giving proportion to all he makes. Here Mr. Ingram asked what sort of a Physician he would make; Mr. F. replied that he was too proud and not sufficiently affable for a doctor, but his very superior mechanical powers with Destructiveness, would enable him to *excel* as a Surgeon, and to stand foremost as a Surgeon Dentist. I say, unequivocally, that this is the ruling point of his character, and rarely equalled by any one. He must have every thing in order, is a great observer; can do his own talking; is full of apt comparisons, and can make himself agreeable. Observe distinctly, that my brother will emphasize this gentleman's *mechanical talent*, his Weight, Self-esteem, Firmness, and Combativeness.

By L. N. Fowler. This gentleman has an active mind; is liable to go to extremes; Self-esteem large and active, and has been cultivated; has a good opinion of himself and what *he* can do; wishes to be at the head and take the lead; thinks he can do a little better than others; likes his own way best, and generally has it; if others think well of him, it is well, if not, just as well; can be set and stubborn if opposed; is fond of opposition; is radical and original in his views; is sarcastic and pointed in his jokes; is a strong positive friend or enemy; is no half-way man in any thing; has versatility of talent; can do almost any thing he wishes; loves variety and has a roving mind; is benevolent and obliging; not very devotional or spiritually minded, yet has no objection to others being very pious; is not marvelously disposed except when he is relating an anecdote where he had a hand in what was done, then the story loses nothing by passing through his hands; has much ingenuity; can use

tools with facility; is a *natural* workman; has a correct eye; is fond of the fine arts, also of the perfect and beautiful; is a great observer of men and things; has much curiosity, and is anxious to see and know what is going on; is a matter of fact man, and has the news as early as any one; has a good local memory; would make a good marksman; can carry a very steady hand, and keep his balance well; is quite fond of order; has a place for every thing; is much annoyed if others misplace or disturb his things; can make money better than he can keep it; and charges high for his services, not because he loves money, but because he thinks they are worth it; as a physician, would be governed by experience and observation; would make a first rate dentist; is *naturally* qualified for that profession; is quite a talker; has fair powers of reflection, and is much disposed to criticise.

ARTICLE IV.

ON THE NATURAL SUPREMACY OF THE MORAL SENTIMENTS.*

In the first place, let us take a brief retrospective survey of the different faculties, and attend to their relations to outward objects, and their relative dignity in the scale of excellence. The faculties are divided into Propensities common to man with the lower animals, Sentiments common to man with the lower animals, Sentiments proper to man, and Intellect. Every faculty stands in a definite relation to certain external objects; when it is internally active it desires these objects; when they are presented to it, they excite it to activity and delight it with agreeable sensations; and all human happiness and misery is resolvable into the gratification or denial of gratification of one or more of our faculties, including in these the external senses, and all the feelings connected with our bodily frame. The first three faculties, Amativeness, Philoprogenitiveness, and Adhesiveness, or the group of the domestic affections, desire a conjugal partner, offspring, and friends—the obtaining of these affords them delight—the removal of them occasions pain. But to render an individual happy, the whole faculties must be gratified harmoniously, or at least the gratifications of one or more must not offend any of the others. The animal faculties are all blind in their impulses, and inferior in their nature to the moral and intellectual powers; and hence,

* From number 11 of the Edinburgh Phrenological Journal.

if we act in such a manner as to satisfy them to the displeasure of the higher powers, the moment the animal excitement ceases, which, by the nature of the faculties, it will soon do, that instant unhappiness will overtake us. For example, suppose the group of the domestic affections to be highly interested in an individual, and strongly to desire to form an alliance with him, but the person so loved is improvident and immoral, and altogether an object which the faculties of Self-esteem, Love of Approbation, Benevolence, Veneration, Conscientiousness, and Intellect, if left dispassionately to survey his qualities, could not approve of; then, if an alliance be formed with him under the ungovernable impulses of the lower faculties, bitter days of repentance must necessarily follow when these begin to languish, and the higher faculties receive daily and hourly offence from his qualities. If, on the other hand, the domestic affections are guided by intellect to an object pleasing to the higher powers, then these themselves are gratified, they double the delights afforded by the inferior faculties, and render the enjoyment permanent.

The great distinction between the animal faculties and the powers proper to man is, that the former are all selfish in their desires, while the latter disinterestedly long for the happiness of others Even the domestic affections, amiable and respectable as they undoubtedly are when combined with the moral feeling, are, in their own nature, purely selfish. The love of children, springing from Philoprogenitiveness, when acting alone, is the same in kind as that of the miser for his gold; an intense interest in the object, for the sake of the gratification it affords to a feeling of his own mind, without regard for the object on its own account. In man, this faculty generally acts along with Benevolence, and a disinterested desire of the happiness of the child mingles along with and elevates the mere instinct of Philoprogenitiveness; but the sources of the affections are different, their degrees vary in different persons, and their ends are also dissimilar. The same observation applies to the affection proceeding from Adhesiveness; when this faculty acts alone, it desires, for its own satisfaction, a friend to love; but, if Benevolence do not act along with it, it cares nothing for the happiness of that friend, except in so far as his welfare is necessary to its own gratification. The horse in a field mourns when his companion is removed; but the feeling appears to be one of personal uneasiness at the absence of an object which gratified his Adhesiveness. His companion may be led to a richer pasture, and introduced to more agreeable society, yet this does not assuage the distress suffered by him at his removal; his tranquility, in short, is restored only by time causing the activity of Adhesiveness to subside, or by the substitution of another

object on which he may expend it. In human nature the effect of the faculty, when acting singly, is the same; and this accounts for the fact of the almost total indifference of many persons who are really attached, by Adhesiveness, to each other, when one falls into misfortune and becomes a disagreeable object to the Self-esteem and Love of Approbation of another. Suppose two persons, elevated in rank, and possessed of affluance, to have each Adhesiveness, Self-esteem, and Love of Approbation large, with Benevolence and Conscientiousness moderate, it is obvious, that, while both are in prosperity, they may really like each other's society, and feel a reciprocal attachment, because there will be mutual sympathy in their Adhesiveness, and the Self-esteem and Love of Approbation of each will be gratified by the rank and circumstance of his friend; but imagine one of them to fall into misfortune, and to cease to be an object gratifying to Self-esteem and Love of Approbation, suppose that he becomes a poor friend instead of a rich and influential one, the harmony between their selfish faculties will be broken, and Adhesiveness in the one who remains rich will transfer its affection to another individual who may gratify it, and also supply agreeable sensations to Self-esteem and Love of Approbation—to a genteel friend, in short, who will look well in the eye of the world.

Much of this conduct occurs in society, and the whining complaint is very ancient, that the storms of adversity disperse friends just as the winter winds strip leaves from the forest that gaily adorned it in the sunshine of summer; and many moral sentences are pointed and episodes finely turned on the selfishness and corruption of poor human nature. But such friendships were attachments founded on the lower feelings, which, by their constitution, are selfish, and the desertion complained of is the fair and legitimate result of the principles on which both parties acted during the gay hours of prosperity. If we look at the head of Sheridan, we perceive large Adhesiveness, Self-esteem, and Love of Approbation, with deficient reflecting organs and moderate Conscientiousness. He has large Individuality, Comparison, Secretiveness, and Imitation, which gave him talents for observation and display. When these earned him a brilliant reputation, he was surrounded by friends, and he himself probably felt attachment in return. But his deficient morality prevented him from loving his friends with a true, disinterested, and honest regard; he abused their kindness, and, as he sunk into poverty and wretchedness, and ceased to be an honor to them, or to excite their Love of Approbation, they almost all deserted him. But the whole connexion was founded on selfish principles; Sheridan honored them, and they flattered Sheridan; and the abandonment was the

natural consequence of the cessation of gratification to their selfish feelings. We shall by and by point out the sources of a loftier and a purer friendship, and its effects.

To proceed with the propensities—Combativeness and Destructiveness also are in their nature purely selfish. If aggression is committed against us, Combativeness draws the sword and repels the attack; Destructiveness inflicts vengeance for the offence; both feelings are obviously the very opposite of benevolent. We do not say that in themselves they are despicable or sinful; on the contrary, they are necessary, and, when legitimately employed, highly useful; but still self is the object of their supreme regard.

The next organ is Acquisitiveness; and it is eminently selfish. It desires blindly to possess, is pleased with accumulating, and suffers great uneasiness in being deprived of its objects. There are friendships, particularly among mercantile men, founded on Adhesiveness and Acquisitiveness, just as in fashionable life they are founded on Adhesiveness and Love of Approbation. Two individuals fall into a course of dealing, by which each reaps profit by transactions with the other; this leads to intimacy, and Adhesiveness probably mingles its influence, and produces a feeling of actual attachment. The moment, however, the Acquisitiveness of the one suffers the least inroad from that of the other, and their interests clash, they are apt, if no higher principle unite them, to become bitter enemies. It is probable that, while these fashionable and commercial friendships last, the parties may employ and profess great reciprocal esteem and regard, and that, when a rupture takes place, the party who is depressed, or disobliged, may recall these expressions and charge them as hypocritical; but they really were not so; each probably felt from Adhesiveness something which they colored over, and perhaps believed to be disinterested friendship; but if each would honestly probe his own conscience, he would be obliged to acknowledge that the whole basis of the connexion was selfish; and hence, that the result is just what every man ought to expect who places his reliance for happiness chiefly on the lower propensities.

Secretiveness is also selfish in its nature; for it suppresses feelings that might injure us with other individuals, and desires to find out secrets that may enable its possessor to guard against hostile plots or designs. In itself it does not desire, in any respect, the benefit of others. Self-esteem is, in its very essence and name, selfish; it is the love of ourselves, and the esteem of ourselves *par excellence*. Love of Approbation, although many think otherwise, is also in itself a purely selfish feeling. Its real desire is applause to ourselves, to be esteemed ourselves, and if

it prompts us to do services, or to say agreeable things to others, it is not from love of them, but purely for the sake of obtaining self-gratification.

Cautiousness is the next faculty, and is a sentiment instituted to protect self from danger, and has clearly a regard to individual safety as its primary object.

This terminates the list of feelings common to man with the lower animals, and which, as we have seen, are all selfish in their objects. They are given for the protection and advantage of our animal nature, and, when duly regulated, are highly useful, and also respectable, viewed with reference to that end; but they are sources of innumerable evils when allowed to usurp the ascendancy over the moral faculties, and to become the leading springs of our social intercourse. From the very circumstance of their being all selfish, their unlimited gratification is physically and morally impossible, and, as this circumstance attending them is of great practical importance, we shall elucidate it at some length.

The birth and lives of children depend upon circumstances over which unenlightened men have but a limited control; and hence an individual whose greatest happiness springs from the gratification of Philoprogenitiveness, is in constant danger of anguish and disappointment by the removal of its objects, or by their undutiful conduct and immoral behavior. Besides, Philoprogenitiveness, acting along with Self-esteem and Love of Approbation, would, in each parent, desire that *his* children should possess the highest rank, the greatest wealth, and be distinguished for the most splendid talents. Now the highest, the greatest, and the most splendid of any qualities necessarily imply the existence of inferior degrees, and are not attainable except by one or two. The animal faculties, therefore, must be restrained and limited in their desires by the human faculties, by the sentiments of Conscientiousness, Benevolence, Veneration, and Intellect, otherwise they will inevitably lead to disappointment. In like manner, Acquisitiveness desires wealth, and, as nature affords only a certain number of quarters of grain annually, a certain portion of cattle, of fruit, of flax, and other articles, from which food, clothing, and wealth are manufactured, and as this quantity, divided equally among all the members of the state, would afford but a moderate portion to each, it is self-evident that, if all desire to acquire and possess a large amount, ninety-nine out of the hundred must be disappointed. This disappointment, from the very constitution of nature, is inevitable to the greater number; and when individuals form schemes of aggrandisement, originating from desires communicated by the animal faculties alone, they would do well to keep this law of nature in view. When

we look around, we see how few make rich; how few succeed in accomplishing all their lofty anticipations for the advancement of their children; how few attain the summit of ambition, compared with the multitudes who fall short. All this arises, not from error and imperfection in the institutions of the Creator, but from blindness in men to their own nature, to the nature of external objects, and to the relations established between these; in short, blindness to the principles of the divine administration of the world.

This leads us to notice the moral sentiments which constitute the proper human faculties, and to point out their objects and relations.

Benevolence has no reference to self. It desires purely and diniterestedly the happiness of its objects; it loves for the sake of the person beloved; if he be well, and the sunbeams of prosperity shine warmly around him, it exults and delights in his felicity. It desires a diffusion of joy, and renders the feet swift and the arm strong in the cause of charity and love. Veneration also has no reference to self. It looks up with a pure and elevated emotion to the being to whom it is directed, whether God or our fellow men, and delights in the contemplation of their venerable and admirable qualities. It desires to find out excellence, and to dwell and feed upon it, and renders self lowly, humble and submissive. Hope spreads its gay wing in the boundless regions of futurity. It desires good, and expects it to come; its influence is soft, soothing and happy; but self is not its direct or particular object. Ideality delights in perfection from the pure pleasure of contemplating it. So far as it is concerned, the picture, the landscape, or the mansion, on which it abides with intensest rapture, will be as pleasing, although the property of another, as if all its own. It is a spring that is touched by the beautiful wherever it exists; and hence its means of enjoyment are as unbounded as the universe is extensive. Wonder or Marvellousness seeks the new and admirable, and is delighted with change; but there is no desire of appropriation to self in its longings. Conscientiousness stands in the midway between self and other individuals. It is the regulator of our animal feelings, and points out the limit which they must not pass. It desires to do to another as we would have another do to us, and thus is a guardian of the welfare of our fellow men, while it sanctions and supports our personal feelings within the bounds of a due moderation.

Intellect is universal in its application. It may become the handmaid of any of the faculties; it may devise a plan to murder or to bless, to steal or to bestow, to rear up or to destroy; but, as its proper use is to observe the different objects of creation, to mark their relations, and

direct the propensities and sentiments to their proper and legitimate enjoyments, it has a boundless sphere of activity, and, when properly applied, is a source of high and inexhaustible delight.

Keeping in view the great difference now pointed out between the animal and properly human faculties, the reader will perceive that three consequences follow from the constitution of these powers: First, the animal faculties in themselves are insatiable, and, from the constitution of the world, never can be satisfied, holding satisfaction to be the appeasing of their highest and last impulse of unregulated desire. Secondly, being inferior in their nature to the human faculties, their gratifications, when not approved of by the latter, leave a painful feeling of discontent and dissatisfaction in the mind, occasioned by the secret disclaimation of their excessive action by the higher feelings. Thirdly, the higher feelings have a boundless scope for gratification; their least indulgence is delightful, and their highest activity is bliss; they cause no repentance, leave no void, but render life a scene at once of peaceful tranquility and sustained felicity; and what is of much importance, conduct proceeding from their dictates carries in its train the highest gratification to the animal propensities themselves of which the latter are susceptible.

We have already adverted to examples of the impossibility of attaining unlimited gratification of the animal propensities; boundless wealth and prosperity cannot physically be attained by all; offspring unlimited in in number and in virtues cannot be the lot of all; the gratification of a boundless ambition cannot be accomplished by all, and the destruction of all whom we hate would be a fearful visitation, if those who hated us had the same scope of gratification to their destructiveness in the subversion of ourselves. In short, we need not enlarge on this topic; for the proposition is so plain, that it can scarcely be doubted or misunderstood.

The second proposition is, that the animal faculties being inferior in their nature, a painful dissatisfaction arises in the mind when they become the leading motives of our habitual conduct, this uneasiness being occasioned by the want of gratification felt by the moral sentiments. Suppose, for example, a young person to set out in life with the idea that the great object of existence is to acquire wealth, to rear and provide for a family, and to attain honor and distinction among men; all these desires spring from the propensities alone. Imagine him then to rise early and sit up late, and to put forth all the energies of a powerful mind in transacting the business of the counting-house, in buying and selling, and making rich, and suppose that he is successful; it is obvious that, in prompting to this course of action, Benevolence, Veneration, and Conscientiousness, had no share, and that, in pursuing it, they have not

received direct and intended gratification; they have stood anxiously and wearily watching the animal faculties, longing for the hour when they were to say enough, their whole occupation, in the mean time, being to restrain them from such gross extravagancies as would have defeated their own ends. In the domestic circle again, a spouse and children would gratify Philoprogenitiveness and Adhesiveness, and their advancement would please Self-esteem and Love of Approbation; but here also the moral sentiments would act the part of mere spectators and sentinels to impose restraints; they would receive no direct enjoyment, and would not be recognised as the fountain of the conduct. In the pursuit of honor, suppose an office of dignity and power, or high rank in society, the mainsprings of exertion would still be Self-esteem and Love of Approbation, and the moral sentiments would still be compelled to wait in weary vacancy, without having their energies directly called into play, so as to give them full scope in their legitimate sphere.

Suppose, then, this individual to have reached the evening of life, and to look back on the pleasures and pains of his past existence, he must feel that there has been vanity and vexation of spirit—a want of satisfying portion; and for this very good reason, that the highest of his faculties have been all along standing idly by, unsatisfied and scarcely half employed. In estimating, also, the real affection and esteem of mankind which he has gained, he will find it to be small or in exact proportion to the degree in which he has manifested in his habitual conduct the lower or the higher faculties. If society has seen himself in his pursuit of wealth, selfish in his domestic affections, selfish in his ambition; although he may have gratified all these feelings without encroachment on the rights of others, they will feel no glow of affection towards him, no elevated respect, no sincere admiration, and he will see and feel this, and complain bitterly that all is vanity and vexation of spirit; but the fault has been his own; love, esteem, and sincere respect, arise, by the Creator's laws, not from contemplating the manifestations of plodding selfish faculties, but only from the display of Benevolence, Veneration, and Justice, as the motives and ends of our conduct; and the individual supposed has reaped the natural and legitimate produce of the soil which he cultivated, and eaten the fruit which he has reared.

The third proposition may now be illustrated. It is, that the arrangements of creation are framed on the principles of the higher sentiments, and that until these become the sources of our actions, it is impossible to attain to happiness, or even to enjoy fully the pleasures which the animal faculties are calculated to afford when employed in their proper sphere.

Imagine another individual to commence life in the thorough conviction that the higher sentiments are the superior powers, and that they ought to be the sources of his habitual actions, the first effect would be to cause him to look habitually outward on other men and on his Creator, instead of looking habitually inward on himself as the object of his highest and chief regard. Benevolence would shed on his mind this conviction, that there are other human beings all as dear to the Creator as he, as much entitled to enjoyment as he, and that his duty is to seek no gratification to himself which is to injure them; but on the contrary, to act so as to confer on them, by his daily exertions, all the services in his power. Veneration would add a strong feeling of reliance on the power and wisdom of God, that such conduct would conduce to the highest gratification of all his faculties, and it would add also an habitual respect for his fellow men, as beings deserving his regard, and to whose reasonable wishes he was bound to yield a willing and sincere obedience; and, lastly, Conscientiousness would prompt him to apply the scales of rigid justice to all his animal desires, and to curb and restrain each so as to prevent the slightest infraction on what is due to his fellow men.

Let us trace, then, the operation of these principles in ordinary life. Suppose a friendship formed by such an individual; his first and fundamental principle is Benevolence, which inspires with a sincere, pure and disinterested love of his friend; he desires his welfare for his friend's sake; next Veneration re-enforces this love by the secret and grateful acknowledgment which it makes to Heaven for the joys conferred upon the mind by this pure emotion, and, also, by the habitual deference which it inspires towards our friend himself, rendering us ready to yield where compliance is becoming, and curbing our selfish feelings when these would intrude by interested or arrogant pretensions on his enjoyments; and, thirdly, Conscientiousness, ever on the watch, proclaims the duty of making no unjust demands on the Benevolence of our friend, but of limiting our whole intercourse with him to an interchange of kindness, good offices, and reciprocal affection. Intellect, acting along with these principles, would point out, as an indispensable requisite to such an attachment, that the friend himself should be so far under the influence of the sentiments, as to be able, in some degree, to meet them; for, if he were immoral, selfish, vainly ambitious, or, in short, under the habitual influence of the propensities, the sentiments could not love and respect him as an object fitted to be taken to their bosom; they might pity and respect him as unfortunate, but love him they could not, because this is impossible by the very laws of their constitution.

Let us now attend to the degree in which such a friendship would

gratify the lower propensities. In the first place, how would Adhesiveness exult and rejoice in such an attachment! It would be overpowered with delight, because, if the intellect were convinced that the friend habitually acknowledged the supremacy of the higher sentiments, Adhesiveness might pour forth all its ardor, and cling to its object with the closest bonds of affection. The friend would not encroach on us for evil, because his Benevolence and Justice would oppose this; he would not lay aside restraint, and break through the bonds of affection by undue familiarity, because Veneration would forbid this; he would not injure us in our name, person or reputation, because Conscientiousness, Veneration, and Benevolence, all combined, would forbid such conduct. Here then, Adhesiveness, freed from the fear of evil, from the fear of deceit, from the fear of dishonor, because a friend who should habitually act thus could not possibly fall into dishonor, would be at liberty to take its deepest draught of affectionate attachment; it would receive a gratification which it is impossible it could attain while acting in combination with the purely selfish faculties. What delight, too, would such a friendship afford to Self-esteem and Love of Approbation! There would be an internal approval of ourselves, that would legitimately gratify Self-esteem, because it would arise from a survey of pure motives and just and benevolent actions. Love of Approbation also would be gratified in the highest degree; for every act of affection, every expression of esteem, from such a friend, would be so purified by Benevolence, Veneration and Conscientiousness, that it would form the legitimate food on which Love of Approbation might feast and be satisfied; it would fear no hollowness beneath, no tattling in absence, no secret smoothing over for the sake of mere effect, no envyings and no jealousies. In short, friendship founded on the higher sentiments, as the ruling motives, would delight the mind with gladness and sunshine, and gratify all the faculties, animal, moral and intellectual, *in harmony* with each other.

By this illustration the reader will understand more clearly what we mean by the harmony of the faculties. The fashionable and commercial friendships of which we spoke, gratified the propensities of Adhesiveness, Love of Approbation, Self-esteem and Acquisitiveness, but left out as fundamental principles all the higher sentiments—there was, therefore, a want of harmony in these instances, an absence of full satisfaction, an uncertainty and changeableness, which gave rise to only a mixed and imperfect enjoyment while the friendship lasted, and to a feeling of painful disappointment, and of vanity and vexation, when a rupture occurred. The error, in such cases, consists in founding attachment on the lower faculties, seeing the Creator never intended them to form a

stable basis of affection, instead of building it on the higher sentiments, which he meant to form the foundation of real, lasting and satisfactory friendship. In complaining of the vanity and vexation of attachments springing from the lower faculties exclusively, we are like men who should try to build a pyramid on its smaller end, and then lament the hardness of their fate, and speak of the unkindness of Providence, when it fell.

(To be continued.)

ARTICLE V.

CONTINUED REMARKS UPON VARIOUS MENTAL PHENOMENA.

BY J. R. BUCHANAN, M. D.

A large developement of Locality produces a vivid and never-ceasing consciousness of the place where we are, and the direction in which we are going. It is therefore impossible for persons thus endowed to lose their way in travelling. If the organ be small, the action of the faculty cannot be so vigorous and unremitting; when the attention relaxes, when some other faculty is brought into play more vigorously, or when our attention is fixed upon something else, we fail to perceive the direction correctly, and perhaps for a moment we are quite unconscious of locality or course—in this manner we make successive mistakes, increasing our error until we are so far mistaken as to be lost. If the organ be still smaller, we are continually forgetting where we are, and are momently unconscious of place. We wake up in the house of a stranger, fancy that we are at home, and discovering our mistake, forget how we came there. Thus far is absence of mind connected with deficient Locality, and by this specimen which we present for illustration, the whole philosophy of absence of mind may be conceived. When the oculo-perceptive organs are large, we have always that presence of mind which consists in a vivid consciousness of objects around us. When the meditating philosopher unconsciously walks into the canal, those organs which would observe external objects are manifestly inactive. But large organs do not slumber or cease to act in the presence of their proper objects; on the contrary, they have a greater tendency to activity than any others, and experience the highest excitement when their proper stimuli are presented. If their perception frequently fails, and such absence of mind is common, we may infer that the perceptive organs

are small. In the case of a clergyman of Mississippi, I found these organs very small, and an incident which happened with him will show the effect. Riding on a tour, he was engaged in meditation and reading some good book, leaving his movements chiefly to the guidance of his horse. The sagacious animal went on correctly and arriving at the Big Black river, passed down into the ferry boat; his rider finding that he had stopped, and unconscious of the cause, urged him on, and actually rode through the boat plump into the river! We doubt not his *presence* of mind was fully restored as he swam ashore, holding up his book.

In the Illinois Legislature, finding Judge B. deficient in the power of auricular perception, I pronounced him liable in that respect to absence of mind. It was said of him that when engaged in study, it was useless to speak to him; his attention was absorbed, and was entirely unconscious of being spoken to. Almost every one has heard of some instance of absence of mind—of persons who sit in company unconscious of what passes, and unconscious of being addressed. The humorists have collected or manufactured a great number of amusing or ridiculous scenes growing out of this absence. The absence of mind as to external objects and sounds, is occasionally complicated with an absence of mind as to time, and as to the usual course of events—(a deficiency of Eventuality and Time.) This was the case with the clergyman who is said to have taken his horse to go to church, and who then forgetting to mount him, walked the whole way, leading him. The story is improved by the additional circumstance that his horse having slipped off his bridle on the way, the reverend gentleman appeared at church before his parishioners with the bridle dragging from his arm.

Absence of mind may thus have a varied character, depending upon a deficiency in observation, either auricular or ocular, and sometimes upon a deficiency in memory. There is another species of absence of mind equally injurious, dependant upon a deficiency of the organ of the sense of feeling. The locality and function of this organ, I discovered in 1837, and have since taught in my lectures. Lying upon the external wing of the sphenoid bone, its developement is easily ascertained. Upon this organ, however, I shall make no farther remark at present, than that it may be subdivided into the organ of touch and the organ of sensation. By means of the organ of the Sense of Feeling, we are conscious of the existence of our body, and of all its sensations. Whatever, internally or externally, makes an impression upon our nerves of sensation, the impression is recognized by the organ of Feeling. But if the organ be very small, the impression is not recognized—we sit with a draft of

cold air blowing upon the back, and unconscious of it at the time, we are surprised next day at finding that we have a cold. While engaged in conversation, we may cut the fingers with a pen-knife, or endure the bites of insects, without being at all conscious. For the same reason, we may observe that some persons are very apt to drop a whip, handkerchief, or pair of gloves, when they are looking at other objects, as the sense of touch then does not keep them conscious of what they are holding. Others continue engaged in conversation until they shiver in the cold, without thinking of the need of fire, and go through arduous or fatal labors without being conscious that they are breaking down their constitutions. This form of mental absence is occasionally seen to an unfortunate extent in those idiots who are very narrow at the basis of the brain, and thus defective in the vital, self-preservative forces. These poor creatures require our constant care.

There is another species of absence of mind which is connected with the faculty of Time. Those who have a great endowment of this faculty are never mistaken as to the hour, and need no watch. Those who are defective in it, commit the grossest mistakes if they have not something near them for a standard. Time with them flies either too fast or too slow. Great excitement in some cases increases the apparent length of time, and in others causes it to slip by unperceived, as when we are listening to an eloquent address, or engaged in interesting conversation. In poetical phrase,

"Noiseless falls the foot of Time, that only treads on flowers,"

and we may add equally noiseless in other cases when his path is not very flowery. A woman in Florida who had fled in the night from the attack of the Indians upon her house, remarked that it seemed the shortest night that she had ever known. Intense attention and excitement seem thus to suspend the action of the faculty of Time; and the merry parties of the young, when summoned from their festivities, generally express their surprise at the lateness of the hour.

Case

After I had been testing and teaching for two or three years the foregoing doctrine as regards the organ of Sound, I read with pleasure an able article upon the subject in the Edingburgh Phrenological Journal, presenting substantially the same idea, from the pen of Jas. Simpson, Esq. Mr. Simpson is not only an excellent phrenologist, but is one of our best living writers, and I should be happy to learn that his time was more devoted to the cultivation of phrenology. We need the labors of many such minds to give it a place among the practical and *accurate* sciences.

As every organ seeks action or indulgence, a large developement of

Language uncontrolled, would probably give a strong desire to talk as well as a facility in talking. Mr. W. F. Brown has given cases of this uncontrollable inclination in insanity. Our whole nation, from Congress to the back-woods, furnishes, abundantly, illustrations of the propensity to talk. Talking is often a manifestation of the animal forces and Self-esteem. The moral faculties restrain the activity of the tongue and give us the patience and modesty which are necessary to a good listener. The American Indians have the reputation of being good listeners, and undoubtedly deserve it—they pay a deferential attention to a public speaker, whether they agree with him or not. Nor are the Indians wanting in the moral sentiments which produce not only grave courtesy, but many other virtues. As regards moral developement, the Indian head is far better than has been supposed by those who have not seen the Indian. I hazard nothing in asserting that the moral developements of the Choctaws are superior to those of the whites; and in some respects we would be benefitted by following the Choctaw code of morals. An American politician or editor may be detected in repeated falsehoods and still be acceptable to his party; but if a young Choctaw politician is detected in a lie, his fate is sealed. He can never again aspire to distinction. It is equally a mistake to consider the Indian as silent as he is commonly supposed. Among the whites, the Indian is circumspect and silent, but among themselves, the Indians indulge freely in the pleasures of conversation. In the crania of most Southern Indians, I have found Language well developed in proportion to the other intellectual organs, and often large. Some of my Indian crania present a developement exceeding any thing that I have found among Caucasians.

To ascertain developements at the orbit, the crania is far better than the living head. By the examination of its bony structure, we find that another important influence which we have not yet considered, modifies the position of the eye. The bony mass between the sockets of which the ethmoid bone is the most important part, produces by its growth that width between the eyes which is so generally observed in the negroes. This breadth has been ascribed by phrenologists to the developement of the organ of Form, but although it is true that Individuality and Form have a tendency by their developement to separate the eyes, the extent of this influence has been greatly overrated, and it operates only upon the upper part of the socket. It is to the size of the inter-orbiter mass of bone that we must ascribe the wide separation of the eyes which is seen in the Chinese and Calmucks—often in the North American Indians, and still more frequently in the negroes. It is a mark which is much less common among those refined nations in which the arts and sciences

have been highly cultivated. Whether or not the approximation of the eyes indicates a deficiency of the perceptive organs, which are the foundations of all art and science—it is clear, when we take an enlarged view of the matter, that the approximation of the eyes in front is characteristic of human superiority to animals. As we descend the scale of animal life from man and the monkey, through all the mammalia, birds, reptiles and fishes, we find the inter-orbitar mass more developed, while the eyes are more and more separated and thrust to the side, as we see in alligators, frogs and fishes. As the forehead is most prominent along the median line, it follows, necessarily, that the more the eyes are separated from the median line, the more (relatively) prominent they must become—hence we find in the lower and even in many of the higher orders of animals, the eye projects from the socket. In like manner in man the eyes may be prominent and widely separated without even a full developement of Language or of Form. I have seen a striking illustration of this in a half-witted negro boy in whose singular features might be observed a faint approximation to those of the horse. His nose was elongated and flattened, while his eyes were separated until they seemed to look in different directions.

As the eyes become separated, they sometimes partially assume the oblique position which is seen in the cat. This is the form which was first adopted by Dr. Gall as the indication of the faculty of Form—or rather the memory of persons. This feature, too, was considered by the great painter Le Brun, characteristic of the approximation of man to animals and indicative of a soul controlled by low or selfish propensities. Great men, heroes and sages, he thought, should be characterized by the opposite form—the elevation of the *internal* and depression of the *external* angle of the eye. There may be some truth in the suggestions of each—but Le Brun could not go beyond the empirical observation—Gall arrived at the *rationale* of the matter, and modified his first suggestion. In this and other details of the science we may still hope to attain a more satisfactory knowledge than has been given us by Gall and Spurzheim. Phrenologists should ever bear in mind, like the great English philosopher, that they have merely been gathering pebbles on the shore of the great ocean of Truth.

ARTICLE VI.

EXAMINATION OF PRISONERS IN GAOL.

Mr. Barber, who was formerly Professor of Elocution in Harvard University (Cambridge, Mass.,) and who is well known as a popular lecturer in various parts of the U. S., has, for the last two years, been delivering lectures on Phrenology in Great Britian. The Bath Herald of Feb. 13th, 1841, gives the following account of a visit made by Mr. B. and others, to the gaol located in that city.

Wednesday morning Mr. Barber, in company with a magistrate and several other gentlemen, made a visit to this prison; Mr. Barber examined the heads of a number of the prisoners in the presence of the parties before referred to, and of the gaoler and turnkey. We forbear, for obvious reasons, to mention names of prisoners; but the gaoler and turnkey were referred to in the cases that will be mentioned, after Mr. Barber's examination of each head. Necessarily a few only are selected:—

No. 1. Mr. Barber pointed out the large size of Acquisitiveness and Secretiveness, the small size of Conscientiousness, Caution and Hope; Firmness and Self-esteem were large. *Inference:* Mr. Barber thought this boy might have been often committed, and was gloomy and desponding in his character. The organization found in notorious thieves.

Each specification mentioned, confirmed by the gaoler and turnkey.

No. 2. Aged 12 years. A large head; active temperament; intellect large. The moral region in this head was fairly developed, but very inferior in size to Acquisitiveness, Secretiveness and Amativeness. Mr. Barber intimated that his plans for theft would be contrived, distinguished by address and cunning, and that the size of his head and intellect would give him a lead in iniquitous practices.

The gaoler stated that he was a leader of a gang of boys, that his skill and cunning were marked, and it was found that he was addicted to other vices connected with his organization, which had been particularly pointed out by Mr. Barber.

No. 3. Aged about 10 years. A superior lad to No. 1. A funny character, and capable of being reformed; committed for the first time.

His tendency to fun and tricks confirmed by the gaoler.

No. 4. A fair intellect, good-natured and funny; Acquisitiveness large; Cautiousness and Conscientiousness small; very capable of reformation.

Every particular confirmed by the gaoler and turnkey—committed for the first time.

No. 5. Mr. Barber requested to express his opinion of this character as violent, ruthless, sanguinary, and probably incorrigible.

Stated by the gaoler as a most dangerous character, and from whom he should expect personal violence more than any other person in the prison.

Many other heads were examined.

It was shown as a general fact, applicable to a large majority of the cases, that the organs of Self-esteem and Firmness, Acquisitiveness and Secretiveness, were large; Conscientiousness and Caution, and the reflective organs, decidedly small. In every case examined, the gaoler and turnkey confirmed Mr. Barber's opinion, with the exception of one notorious character, in whom, however, the organ of Conscientious was small, but whose career was ascribed by Mr. Barber and two other phrenologists who were present, to the dominating influence of circumstances. Those present at this examination were struck with the importance of phrenology as furnishing an efficient means for a classification of prisoners, founded on their respective developements; and great regret was expressed that the corrigible and incorrigible, as estimated by palpable differences in organization, should not be separated from each other. Speaking on grounds of probability, the differences in the above respect were great in several instances; and it appears that among about thirty individuals, two or three classes might be formed requiring differences of discipline, and especially of association of each other.

ARTICLE VII.

EXTRACTS FROM MR. COMBE'S TOUR IN THE UNITED STATES.

Developement of the Brain in the Inhabitants of Boston.—New England was peopled chiefly by individuals who left their native homes for the sake of enjoying religious liberty in their new abodes; and the cerebral organization which such dispositions imply, appears to have descended to their posterity. In all countries which I have visited, I have remarked that the female head, although less in size, is more fully developed in the region of the moral sentiments, in proportion to the other regions, than that of the male; and Boston presents no exception to the rule. Here the female head is in general beautifully developed in

the moral and intellectual departments, and the natural language of the countenance is soft, affectionate and rational. In the men, also, large moral and intellectual organs are very general; but Benevolence and Veneration are more frequently large than Conscientiousness. The cerebral organization of this people, taking them all in all, appears really to have been enlarged in the moral and intellectual regions by long cultivation, added to the influence of a favorable stock. Vol. i. p. 86.

November 17. *Dr. Spurzheim's Skull and Brain.*—In conversation Dr. Spurzheim more than once said to me, "I hope that when I am dead they will not bury my skull. I wish it to be preserved as evidence of my natural dispositions. Posterity will judge by it whether I am a quack and a charlatan, as your Edinburgh Reviewer called me." His wish has been fulfilled; the Phrenological Society of Boston has preserved his skull, and his brain also, in alcohol; both are locked up in an iron safe, and form a very interesting addition to their collection of casts and skulls. The safe was opened to-day in presence of a committee of the society, and I inspected its contents. The skull is rather thicker than the average of British healthy skulls; the diploe presents large cells, but the surfaces are dense. It is thickened over Combativeness and Conscientiousness. The superorbiter plate of the skull is both broad from side to side, and long from the front backwards, indicating a large anterior lobe of the brain. The convolutions have left strong indentations in the bone, particularly those of the organ of Language. Under them the skull is very thin. The skull is thin also at Constructiveness, and there is a considerable sinus at Individuality and Size; but these organs are nevertheless large in the brain. I have heard Dr. Spurzheim converse fluently in German, French and English, and he wrote these three languages grammatically. I am not certain whether he spoke Italian, but rather infer from some incidental remarks of his that he did. He lectured without notes; and his language was exceedingly appropriate and pregnant with meaning. The brain is in perfect preservation; it is large, and shows a large anterior lobe and large coronal region, the convolutions here being plump and round. The base also is well developed; but as it is floating in alcohol and hermetically sealed, I could examine it only through the glass. I perceived, however, that Coloring is deficient. The convolutions of Language and Form are large. The convolutions of the Love of Life and Destructiveness are large. Those of Alimentiveness are less, and he was extremely temperate in his habits.

He was in his fifty-sixth year at the time of his death, and apparently changes had already begun to take place in his skull. During life he used to complain of his deficiency of Combativeness. The rude and

illiberal attacks that were made by the press, not only on his opinions, but on his character as a man, roused his Destructiveness and made him angry; but his deficiency in Combativeness rendered it extremely disagreeable to enter the lists as a combatant, in his own defence. He had a perfect command over his Destructiveness, but he felt its power. I have heard him say, "I am too angry to answer this at present; I must wait till I am cool;" and he would wait for weeks or months, until he could give a calm and philosophical reply. Vol. i. p. 135.

December 6. *Colonel Burr.*—I examined an authentic cast from nature, taken after death, of the head of the celebrated Colonel Burr, who killed Gen. Hamilton in a duel, and afterwards attempted to get up an insane expedition from Blannerhassett's Island in the Ohio, the precise object of which is not well ascertained. He died at an advanced age, and the brain may have shrunk; the head at death was of average size; the intellectual region was moderately well developed; the organs of Individuality, Size and Weight predominating. The organs of Amativeness, Philoprogenitiveness, Combativeness, Destructiveness, Secretiveness, Self-esteem and Firmness, were large. Those of the moral sentiments, particularly Conscientiousness, were remarkably deficient. The moral region was shallow, and also narrow. In short, it was that kind of head which is generally found in criminals. It indicated sensual, fierce, vindictive, cunning, and selfish dispositions, unrestrained by justice or humanity, but combined with great courage, determination, and perseverance. The intellect is acute, but neither profound nor comprehensive. Burr was an infamous and heartless seducer; a vindictive duellist; and an adept in plausibility and falsehood. He enjoyed some degree of intellectual reputation, but his general conduct showed that he was a shallow politician, a nonentity as a statesman, and a third-rate lawyer. He loved his daughter dearly, and this was almost his only virtue. Vol. i. p. 144.

Martin Van Buren.—On the same occasion, I saw a cast from nature of the head of Mr. Martin Van Buren, the present President of the United States. The head is large; the anterior lobe is of ample dimensions in both regions. The base of the brain is largely developed; the coronal region is both broad and high. Secretiveness, Cautiousness, and Love of Approbation are very large, and Self-esteem is large. Acquisitiveness and Ideality are fully developed. Benevolence and Veneration are large. Firmness is rather less than Veneration, but not deficient, and Conscientiousness is only rather full, being the smallest of the moral organs. This head indicates power, and on the whole presents many of the elements of an estimable character. The combination of great

Clay - and Calhoun

Cautiousness and Secretiveness, however, with Conscientiousness and Firmness relatively less, will produce a tendency to prefer indirect to direct means of accomplishing an end. In difficult situations dexterity and address will be more relied on than open manly courage, and an apparent expediency will sometimes be preferred to justice. The intellect is capable at once of managing details, and taking in comprehensive views, and if, as is affirmed, appearances of mystification occasionally present themselves in his public conduct, they are not owing to imperfect intellectual conceptions, but are designed to serve a purpose. The combination of the whole organs resembles that which one would expect in a dexterous and successful courtier in an absolute monarchy, rather than in the president of a democracy. Vol. i. p. 144.

January 4. *Phrenology.*—Mr. Nicholas Biddle, President of the United States Bank, called and informed me that he had attended a course of lectures given by Dr. Gall at Carlsruhe, in Germany, in 1806 or 1807. He subsequently presented me a skull which Dr. Spurzheim had marked for him, showing the situations of the organs as then discovered, and which had remained in his possession ever since. This relic possesses historical value. It has often been asserted that Dr. Gall *invented* his physiology of the brain, and did not discover it. When I was in Germany in 1837, I saw a collection of books describing the science at different stages of its progress, and also skulls marked at different times; all proving that the organs were discovered in succession as narrated by Drs. Gall and Spurzheim. This skull, which records the state of the science in 1806 and 1807, presents blank spaces where the organs of Hope, Conscientiousness, Individuality, Concentrativeness, Time, Size, and Weight, are now marked, these having at that time been unascertained. Farther, the local situations, and also the functions of the organs then marked by Dr. Gall as ascertained, continue unchanged in the marked skulls of the present day. Vol. i. p. 188.

Washington, Feb. 20. Mr. Calhoun, of South Carolina, spoke two or three times. He seemed to be about sixty, tall and slender, and of a highly bilious and nervous temperament. The lower ridge of his forehead projects much, indicating great powers of observation, but the superior ridge devoted to reflection, is much smaller. Although the latter region looks narrow and retreating, yet there is enough of brain to give average power to his reflecting faculties. He has very large Self-esteem and Firmness. The head indicates much self-will and determination; great powers of perseverance; a capacity for details, but little profound judgment.

I saw also Mr. Clay, but he did not speak. He is nearly bald. The

Webster

anterior lobe of the brain is long and high, the middle perpendicular portion predominating. He seems to have large Acquisitiveness and considerable Ideality. In him also Self-esteem and Firmness are large. The coronal region rises moderately high above Cautiousness and Causality, and the head altogether is high and long, rather than broad. It is of ample size. His temperament is nervous-sanguine, with a little bilious. He is tall and slender; and apparently between sixty and seventy. This combination indicates great natural vivacity, readiness of apprehension, facility of illustration, with force of character; but there are two defects in the brain which will prevent such an individual from rising to the first class of minds. Causality and the moral organs do not present the highest degree of developement. Men thus constituted do not sufficiently appreciate the influence of the moral sentiments as a natural *power*, nor do they trace the causes with which they deal, to their first elements, nor follow them to their remote consequences. Mr. Clay's head, however, bespeaks a man greatly above an average in point of mental power, and also practical in his tendencies; and therefore well adapted to the general American mind of the present day.

Here, also, sits Daniel Webster, looking like an intellectual giant among the senators. His enormous anterior lobe, and generally large head, reinforced by large lungs, mark him as a natural leader; but his reflective organs are too much developed in proportion to his Individuality to render his eloquence equally popular with that of Henry Clay. Mr. Webster needs a great subject, involving a profound principle and important consequecnes, before his strength can be called forth. Give him these, and he will rise to the highest eminence as a pleader and a statesman; but his intellect is too profound and comprehensive to be fully appreciated by the people. On seeing the man, therefore, I am not surprised at a circumstance which I have remarked, that, while Mr. Webster is regarded by a few as *the* great political character of the United States, Mr. Clay has at least a hundred devoted followers for one of Mr. Webster's admirers. Webster, however, like Burke, will be quoted for the depth of principle and wisdom involved in his speeches, when the more fascinating but less profound orations of Mr. Clay have sunk into oblivion. Vol. i. p. 271.

MISCELLANY.

Phrenological Lectures and Examinations of the Messrs. Fowlers in Boston.—We copy from the Boston Daily Mail of May 28th, the following account of the Messrs. Fowlers' Lectures and Examinations in Boston. It is a record of facts, and is due no less to the individuals concerned than to the science: "Having been one of a pretty numerous and very attentive audience that attended the lectures and demonstrations of the skilful phrenologists above mentioned, it seems to be but an act of justice to a science too little understood, to make known the impressions I received from what I heard and saw. When Spurzheim was here, I listened with delight to the illustrations he gave of his favorite science, but I felt as if there was something wanting to compel me to assent as fully to the principles of phrenology as I did to the wisdom and knowledge of our nature with which his lectures abounded. So also Mr. Combe in his public lectures omitted to give that satisfaction which is derived from an application of principles upon the spot where they are asserted. The Fowlers, with a courage amounting to almost rashness, have just dared to do what their great predecessors with greater caution had avoided. At the commencement of their course, a committee of gentlemen no more interested in them or in the science than all men are interested in discovering the truth, and some of them unbelievers in the science, were chosen by the company to provide suitable persons, of well known character, on whose heads after each lecture an application of the science could be made. Those who take a pride in scoffing at the science, and who are sure that they are wiser than other men, because they can see the folly of phrenology without looking into its claims, have repeatedly said, "If the science is true, why not demonstrate its truths at once, without talking so much about it. If it is founded on facts, tangible and evident, let us see some of them and we will believe." These doubters have had an opportunity such as should content the most unreasonable.

"Every evening, from four to ten persons were brought forward by the committee, persons, in all but one or two instances, entirely unknown to the lecturers, who, in the face of their friends and the audience, have named their leading characteristics with a readiness and a minuteness of detail, which would have puzzled the owners of the heads themselves to equal. So exact in general were the descriptions of character, that failure in even one point was rare, and correctness in every point was common. A mistake was an exception to a hundred truths. The committee were gentlemen of known respectability and talent; and, as one of them remarked to the audience, "as unwilling to deceive as to be deceived." In the course of the lectures, perhaps fifty heads were examined publicly in this manner without any considerale error. This trial one would think sufficient to show that there was some indication of character on the exterior of the cranium; but this was not the only trial to which these lecturers were subjected. In almost every case one lecturer was shut up in a remote room, while the other examined a head, and then the absent lecturer was called and required to pronounce upon

the same head. That one should for once guess right, would not have surprised me; that one should always have guessed right, *would* have been strange, but that the decisions of both should have coincided. so remarkably strange in every particular, as they did, compelled one to believe that the decisions were based upon facts and principles, and not upon *guess-work* as some pretended. But still there were sturdy doubters, who could not deny that the characters had been faithfully drawn, but who maintained that the lecturers were guided by their *eyes*, by the physiognomy and general appearance of the persons examined, and not by the bumps and general proportions of the head. To meet this unreasonable cavil, the lecturers were for one whole evening subjected to such an ordeal as none but rash men would submit to. They were both blindfolded effectually by the Committee, then separated, and required, in turn, in the absence of each other, to examine such heads as the Committee subjected to their touch.

The Committee, moreover, had previously written the characters of the candidates as nearly as the candidates and their best friends could describe them; and after both lecturers had done, the written character was read. I believe I do not exaggerate when I say that, in almost every particular, it seemed as if the written character was only notes taken during the examination, as the words dropped from the mouth of the lecturers. Were it desirable or proper, I could allude to some of the cases, but as I have no permission to do this, it being more properly the business of the Committee, I will only notice one remarkable case presented at the last trial.

While the lecturers were blinded, a gentleman called aside the chairman of the Committee, and said that he had just brought a girl 14 or 15 years of age, a complete idiot. He had been endeavoring for three years to have her taught something, but without success. She could not even learn a few of the letters; and ideas, intellect, she had none. When it was urgued that a public examination might hurt her feelings, he assured the Committee that she could not understand what might be said, and as he was axious to know what was the deficiency, the examination might lead to good; she was accordingly placed under the hand of the blindfolded lecturer, who felt one or two seconds and then said he had rather not say any thing about the head under examination. Some of the company said "speak out." He at last said that the head was a most unfortunate one, so destitute of intellect that it could not belong to an accountable being. The moral sentiments were wanting, and the only indication of intellect was a desire to see what was going on around, whilst there was no intellect to treasure up or use the facts thus collected. The other lecturer was then called, and his hands had hardly touched the head, before he declined saying any thing about it. When urged to speak freely, he very reluctantly said that the intellect was deficient, and the person incapable of taking care of himself, (he supposed it was a boy, as females were seldom subjected to examination.) The gentleman who brought the idiot, declared that the description was exact except in one point. They had said that her organ of Language, (perhaps one of the most difficult to decide upon without sight,) was not deficient, and he averred that she had not been able to learn half a dozen letters of the alphabet in three years. He acknowledged, however, that she

could talk, and the chairman of the committee removed the objection by stating that the organ of Language would not be exercised in learning the characters of the alphabet, any more than in learning geometrical figures.

"Such is an imperfect sketch of this remarkable course of lectures. As to the qualifications of the lecturers as speakers, it may be said that they are plain, unpretending men, more remarkable for their sound sense and acute observations upon men and manners, than for finished elocution or style. A strong spirit of philanthropy and a high moral tone distinguish all their remarks. They evidently wish to make their science useful to mankind, and the writer of these remarks, no more interested in their lectures than any other citizen, and a stranger to them till after the course had commenced, wishes them good speed." F.

Professor Gibson and Phrenology.—Dr. Wm. Gibson, Professor of Surgery in the University of Pennsylvania, in his recent work titled "Rambles in Europe," makes several allusions to Phrenology. In describing an interview with the celebrated writer, Miss Edgeworth, who, it appears, is very much prejudiced against the science, Dr. Gibson remarks that she "finally pressed me so hard to say what I really thought of the science, as to induce me to tell her that I believed the general principles of the science to be correct; that many of the facts brought forward by Combe and other distinguished phrenologists, were undoubtedly striking and important; that some of the details were inaccurate and inferences drawn from them equally erroneous; that the science had, however, suffered immensely from ignorant pretenders and charlatans, and that great allowance must be made for the mistakes of such persons who often undertook to examine heads and pronounce decisively on character without knowledge of the form of a single bone, or of the structure of any part of the brain: all which she admitted seemed reasonable enough, but still maintained she was sure there could be nothing in it, as she herself had known many persons of extraordinary intellects with small heads." *Query*—Whose testimony is most to be credited on the merits of Phrenology, *Dr Gibson or Miss Edgeworth?*

Mr. Combe's Tour.—This work is now being published in *Waldie's Circulating Library*, which will bring it before many thousand readers. We learn also that the first edition of the work published by Carey & Hart of this city, is already nearly exhausted. The character and circulation which these volumes are obtaining, must be gratifying to Mr. Combe as well as to every phrenologist.

Rights of Women.—The New York New World, of May 8th, contains an excellent essay on the *Rights of Women*, by E. P. Hurlbut, Esq. The principles advanced in this essay are based entirely on physical organization, (Physiology and Phrenology) and are presented with great clearness and ability. We sincerely hope Mr. Hurlbut will be induced to publish a work, embracing his views in full, on Political Ethics.